

Two New Anthiine Fishes of the Genus *Holanthias* from the Southern and Western Pacific

John E. Randall, L. A. Maugé and Yves B. Plessis

(Received August 14, 1978)

ABSTRACT Two anthiine fishes of the genus *Holanthias* from moderately deep water are described as new: *H. katayamai* and *H. tapui*. Both have been identified previously as *Scalantarus chrysostictus* (Günther). *H. katayamai*, known from Guam and southern Japan, is distinctive in its deeply emarginate caudal fin with broadly rounded lobes, lack of elongate dorsal spines, but with greatly prolonged third dorsal, second anal and second pelvic rays. *H. tapui* is described from two specimens from Tahiti and one from the Cook Islands; it is closely related to the Indonesian species *H. chrysostictus*, differing principally in its longer and more lunate caudal fin, higher gill-raker count, and in coloration.

Two colorful deep-dwelling fishes of the family Serranidae, subfamily Anthiinae, one from Tahiti and Rarotonga and the other from Guam and Japan, are described as new in the present paper. Both have been masquerading under the same specific name, *chrysostictus* Günther; they have been placed either in the genera *Holanthias* Günther or *Scalantarus* Smith. Allied species have been classified in the genus *Odontanthias* Bleeker.

As indicated by Smith (1964), there is a wide divergence in the views of systematists about the generic limits of this group of anthiine fishes which share the characters of a broad lancet-shaped patch of teeth on the vomer and a large patch on the tongue. Many of the species exhibit filamentous rays in the median fins. The genus *Caprodon* Temminck et Schlegel also has a quadrangular patch of teeth on the vomer and numerous small teeth on the tongue, but it is clearly distinct in having three instead of two predorsal bones, 17 instead of 15 branched caudal rays, smooth subopercular and interopercular margins, and in lacking produced rays in the fins.

The first species to be described in the group of fishes to which the generic names *Holanthias*, *Odontanthias*, and *Scalantarus* have been variously applied was *Serranus borbonius* Valenciennes in Cuvier and Valenciennes (1828). This was followed by *Anthias fronticinctus* Günther (1868) from St. Helena, *Aylopon martinicensis* Guichenot (1868) from

Martinique (*Aylopon* is an objective synonym of *Anthias* as it has the same type species, *Labrus anthias* Linnaeus), and *Anthias rhodopeplus* and *A. chrysostictus*, both described by Günther (1871) from Celebes. Günther (1868) proposed the genus *Holanthias*, designating *Anthias fronticinctus* as the type species. Bleeker (1873) added *Odontanthias*; the type species was subsequently designated as *Anthias rhodopeplus* Günther by Bleeker (1876). Jordan and Evermann (1896) created another genus in the group, *Ocyanthias*, for *Aylopon martinicensis*; however, this has been placed in the synonymy of *Holanthias* by Norman (1957) and others. Smith (1964) proposed *Scalantarus*, designating *Anthias chrysostictus* as the type species.

Smith distinguished *Scalantarus* from *Odontanthias* by the presence of teeth on the "pterygoids" of the former. One of us has shown that juveniles of *O. borbonius*, at least, have dentate entopterygoids but lose these teeth with age (Maugé, in press). We therefore place *Scalantarus* in the synonymy of *Odontanthias*.

On the advice of William D. Anderson, Jr. and Phillip C. Heemstra, who are studying fishes of the subfamily Anthiinae, we employ the generic name *Holanthias* for our two new species and regard *Odontanthias* as a synonym.

Materials and methods

With the exception of the three known specimens of *Holanthias chrysostictus*, all

specimens examined are types; they are listed under each species description. The type specimens of the two new *Holanthias* have been deposited in the Bernice P. Bishop Museum, Honolulu (BPBM), Muséum National d'Histoire Naturelle in Paris (MNHN), Biology Department, University of the Ryukyus, Naha, Okinawa (URB), and the J. L. B. Smith Institute of Ichthyology, Rhodes University, Grahamstown, South Africa (RUSI).

In the descriptions of the new species, data in parentheses refer to paratypes. More measurement data are presented in the tables than are summarized in the text.

In the recording of meristic data, the last two dorsal and anal rays were counted separately when there was space between their bases. The rudimentary upper pectoral ray is included in the ray count of this fin. The number of scales above the lateral line was counted in a zigzag line to the base of the first dorsal spine. It was not possible to make a consistently accurate count of the number of cheek scales due to their not being arranged in straight oblique rows. Gill-raker counts, which were made on the first gill arch, include all rudiments; the raker at the angle is recorded with the lower-limb count.

Standard length (SL) was taken from the most anterior point of the upper lip to the base of the caudal fin (end of hypural plate). The depth of the body is the greatest depth. The width of the body was measured just behind the gill opening. Head length was taken from the most anterior point of the upper lip to the end of the opercular flap. The length of the caudal peduncle was measured diagonally from the rear base of the anal fin to the mid-base of the caudal fin. Caudal concavity is the horizontal distance between verticals at the distal ends of the longest and shortest caudal rays. The lengths of the dorsal and anal spines were taken to their extreme bases (not to the edge of the basal scaly sheath).

Holanthias katayamai, sp. nov.

(Fig. 1)

Holanthias chrysostictus (non Günther); Kamo-hara, 1934: 458, fig. 1 (Ōshima, Kochi Prefecture, Japan); Katayama, 1960: 138, pl. 73 (after Kamohara); Tomiyama, 1966: 188, fig. 1 (Hachijo Island, Japan); Kamo-hara and Yamakawa, 1968: 3 (Koniya, Amami-ōshima, Ryukyu Islands).

Scalantarus chrysostictus (non Günther); Kata-

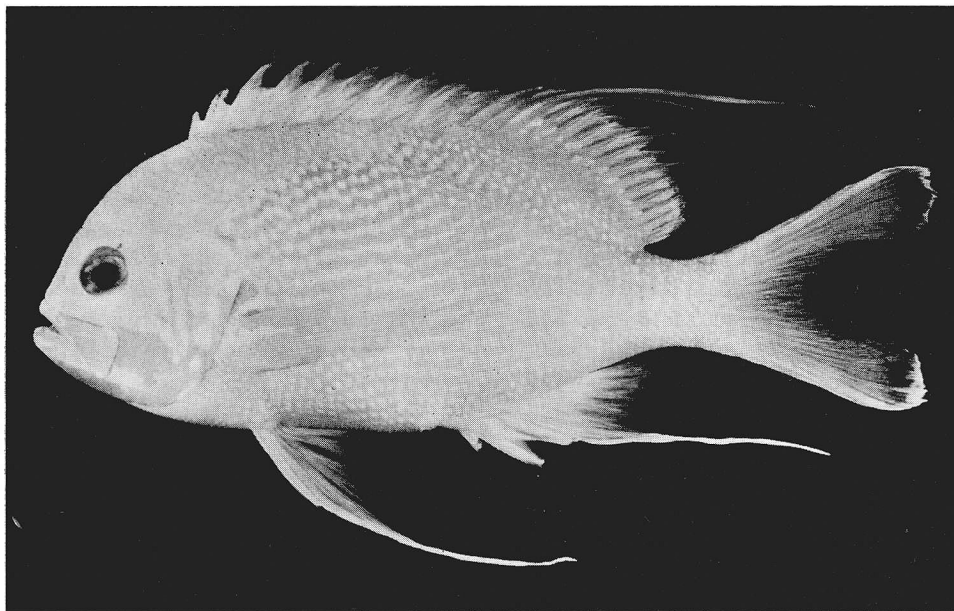


Fig. 1. Holotype of *Holanthias katayamai* Randall, Maugé and Plessis, 163 mm SL, Guam, BPBM 8527. (Copy of Ektachrome slide).

yama, 1975: 175, fig. 8 (Naha, Okinawa); Masuda, Araga and Yoshino, 1975: 220, pl. 51 H (southern Japan).

Holotype: BPBM 8527, 163 mm SL, Mariana Islands, Guam, NW of Haputu Point, 177 m, hook and line, personnel of the Division of Fish and Wildlife, Government of Guam, 20 June 1968.

Paratypes: BPBM 5848, 126.5 mm SL, Mariana Islands, Guam, between Merizo and Umatac, about 300 m, crew of Guam Fish and Wildlife vessel "Panglau Oro," 7 April 1967; URB 78-0148, 145 mm SL, Ryukyu Islands, Okinawa, more than 100 m, hand-line fisherman, obtained at market by T. Yoshino, 6 June 1973; MNHN 1978/136, 150.7 mm SL,

Ryukyu Islands, Okinawa, Naha market, T. Yoshino, August, 1973.

Diagnosis. Dorsal rays X, 16~17; pectoral rays 16~17, lateral-line scales 38~41; gill rakers 12~13+29~30; head length 2.8~2.9 in SL; caudal fin deeply emarginate with broadly rounded lobes; no elongate dorsal spines; third dorsal, second anal, and second pelvic rays produced into very long filaments; head above upper jaw bright yellow, this color continuing onto nape, anterior body above lateral line and most of spinous portion of dorsal fin; ventral part of head pink with a streak of yellow beginning from front of lower jaw; body pink with a yellow spot on each scale, these joining to form lines in region

Table 1. Proportional measurements of type specimens of *Holanthias katayamai*, expressed as a percentage of the standard length.

	Holotype	Paratypes		
	BPBM 8527	BPBM 5848	URB 78-0148	MNHN 1978/136
Standard length (mm)	163.0	126.5	145.0	150.7
Depth of body	44.2	42.6	44.5	42.7
Width of body	16.5	16.0	17.6	16.2
Head length	34.5	36.1	35.4	35.5
Snout length	8.2	8.3	8.4	7.8
Orbit diameter	9.1	10.4	9.4	9.9
Postorbital length of head	18.3	18.2	18.3	18.1
Bony interorbital width	9.5	9.3	9.8	8.9
Length of maxilla	16.2	16.2	16.2	16.0
Greatest depth of maxilla	7.9	7.3	7.5	7.6
Least depth of caudal peduncle	13.1	13.8	14.0	13.8
Length of caudal peduncle	22.6	20.4	20.8	22.0
Snout to origin of dorsal fin	32.9	32.4	31.7	32.5
Snout to origin of anal fin	65.5	67.6	64.7	66.0
Snout to origin of pelvic fins	36.3	37.6	39.5	37.0
Length of dorsal fin base	68.0	66.8	68.5	68.0
Length of first dorsal spine	6.4	6.9	6.8	6.6
Length of second dorsal spine	9.5	10.8	10.1	9.8
Length of third dorsal spine	14.3	14.9	12.3	14.6
Length of fifth dorsal spine	15.2	15.9	14.4	16.4
Length of third dorsal ray	54.3	50.6	48.4	57.1
Length of anal fin base	20.3	20.0	21.5	19.3
Length of first anal spine	7.0	9.6	9.0	8.8
Length of second anal spine	14.9	15.8	14.0	15.3
Length of third anal spine	15.5	16.6	15.0	15.6
Length of second anal ray	47.6	39.5	38.7	broken
Length of caudal fin	34.5	33.8	33.6	33.8
Caudal concavity	14.9	14.6	15.8	16.3
Length of pectoral fin	31.1	34.8	29.3	31.1
Length of pelvic spine	17.4	18.0	16.7	16.9
Length of pelvic fin	59.4	50.5	—	57.2

above pectoral fin; caudal fin red with a yellow margin except posterior concavity; dorsal filaments red; anal and pelvic fins yellow, the filaments of these fins pale yellow.

Description. Dorsal fin rays X, 16 (16~17); anal fin rays III, 7 (7~8); pectoral fin rays 16 (16~17) (all but upper two branched); pelvic fin rays I, 5; principal caudal rays 15 (upper and lower unbranched); upper procurent caudal rays 6; lower procurent caudal rays 4; lateral-line scales 41 (38~41); scales above lateral line to origin of dorsal fin 7 (7~8); scales below lateral line to origin of anal fin 19 (18~19); circumpeduncular scales 23; gill rakers 13+29 (12~13+29~30); pseudobranch lamellae 23 (24~25); vertebrae 9+17; two predorsal bones.

Body ovate, relatively deep, the depth 2.26 (2.25~2.35) in SL, and compressed, the width 2.69 (2.53~2.66) in depth; head length 2.90 (2.77~2.82) in SL; snout length 4.19 (4.22~4.56) in head; orbit diameter 3.77 (3.48~3.61) in head; interorbital space convex, the bony width 3.65 (3.59~3.89) in head; least depth of caudal peduncle 2.63 (2.53~2.61) in head.

Mouth moderately large, the lower jaw projecting, and highly oblique, forming an angle of about 55° to the horizontal; maxilla reaching or nearly reaching a vertical at hind edge of pupil; maxilla broadly expanded posteriorly, its greatest depth 1.15 (1.25~1.42) in orbit diameter, truncate posteriorly with rounded corners; no supramaxilla.

Upper jaw with an outer row of well-spaced canine teeth along side, ending in a stout canine or adjacent pair of canines at corner of front jaw; most of canine teeth in posterior half of upper jaw slanting and/or curving slightly anteriorly and inwardly; a band of villiform teeth in upper jaw, stouter anteriorly (the inner ones enlarged and incurved), in about six irregular rows at front, reducing to a single row at posterior end of jaw, this band extending more medial than stout canines at corner of jaw but not to symphysis (symphyseal gap between bands of upper teeth nearly 2 mm on holotype). Lower jaw with one to four stout forward-projecting canine teeth anteriorly on each side of symphysis and a large canine about one-fourth distance from front of jaw; a villiform band of teeth

in lower jaw in about six or seven irregular rows, narrowing at posterior end to a single row, the inner row of teeth on about posterior half of jaw longer than outer teeth. A quadrangular lanceolate patch of small villiform teeth on vomer; a broad triangular patch of small villiform teeth on palatine nearly contiguous with a broad patch on pterygoid. Tongue broadly triangular, the tip rounded, nearly covered on upper surface with a roundish patch of small villiform teeth.

Nostrils in front of center of eye, the anterior in a short membranous tube with a broadly expanded dorso-posterior flap; posterior nostril about twice as large, without a rim, and lying about two nostril diameters from edge of orbit; a large pore above and slightly posterior to anterior nostril.

Three prominent flat spines on opercle which project diagonally upward, the middle one much the longest and most posterior, its tip slightly closer to the tip of upper than lower spine; preopercular margin serrate, one to three serrae at angle enlarged as flat spines; upper preopercular serrae 33 (left), 41 (right) (26~33); lower preopercular serrae 2 (2~6); subopercle with 4 (4~7) serrae; interopercle with 1 (2~6) serrae; posttemporal with a few serrae.

Scales ctenoid; no auxiliary scales except a few on head and nape; no elongate pelvic axillary scale; head, including maxilla and mandible, scaled except side of snout below a diagonal from top of eye through nostrils, suborbital, lips, throat, and branchiostegal rays and membranes; scales progressively smaller dorsally on head proceeding toward snout, those at front of snout very small; prepelvic scales also progressively smaller anteriorly; scales on maxilla small, in about eight irregular rows across its maximum depth; fins except spinous portions with small scales nearly to distal margins (many scales lost on fins of type specimens); spinous portion of dorsal fin with a narrow projection of small scales extending upward from base of each spine along anterior surface about 1/4 to 1/3 length of spine.

Lateral line complete, in a smooth curve to straight portion on midside of caudal peduncle, broadly arched over pectoral region,

the highest part centered below bases of sixth to ninth dorsal spines (where only two rows of large scales separate the lateral line from dorsal fin base).

Origin of dorsal fin above posttemporal; a vertical from first lateral-line scale in alignment with base of third dorsal spine; first dorsal spine about half length of third; third to tenth dorsal spines about equal in length, the fifth slightly the longest, 2.26 (2.16~2.46) in head; third dorsal soft ray very elongate, 1.84 (1.75~2.07) in SL, and the fourth often moderately produced (some other rays, particularly in anterior half of soft portion of fin, may have filamentous tips); last dorsal soft ray 1.6 to 2.0 in fifth dorsal spine; interspinous membranes of dorsal fin more deeply notched anteriorly, the first membrane incised about three-fourths length of second spine, and the last membrane only about one-fifth length of tenth spine; a small cirrus from upper part of each interspinous membrane of dorsal and anal fins; all dorsal and anal soft rays branched; origin of anal fin below base of second dorsal soft ray; third anal spine the longest, 2.22 (2.18~2.36) in head, slightly longer than second spine; first anal spine contained about 1.7 times in length of third anal spine; second anal soft ray very prolonged, 2.10 (2.54~2.58) in SL; caudal fin deeply emarginate with broadly rounded lobes, the longest rays 2.90 (2.96~2.97) in SL, the caudal concavity 2.31 (2.18~2.47) in head; ninth or tenth pectoral rays longest, reaching to or slightly beyond a vertical at base of second anal spine, 3.22 (2.87~3.41) in SL; origin of pelvic fins below upper pectoral base; second pelvic ray very long and filamentous, when intact reaching posterior to rear base of anal fin, the length 1.68 (1.75~1.98) in SL.

Color in alcohol pale, darker over interorbital space, and faintly dusky on upper part of back and basally on dorsal fin; filament of elongate third dorsal ray usually dark-edged; tips of dorsal spine cirri may be slightly dusky.

Color from an Ektachrome transparency taken of the holotype by the senior author: head above upper jaw, nape, and back above lateral line to about base of ninth dorsal spine bright yellow; head below a line projected from upper edge of maxilla pink; a longitu-

dinal streak of yellow from front of chin passing about two-thirds distance to margin of operculum; a similar narrower streak on upper lip, breaking into two long dashes along side of lip; a yellow blotch on posterior corners of maxilla; four spots of yellow on lower posterior part of operculum; margins of opercle and preopercle pink; a spot of pink within yellow region of preopercle near posterior margin; body below anterior portion of lateral line pink with a yellow spot on each scale; these spots cojoined dorso-anteriorly to form irregular slightly diagonal lines; spinous portion of dorsal fin yellow, the outer part of the interspinous membranes of the third to tenth interspinous membranes red (outer half of the fifth to tenth membranes red; less red anteriorly); soft portion of dorsal fin pink on basal third with a row of small irregular yellow spots (two spots on some membranes); dorsal rays red, streaked with yellow; anal fin yellow with streaks of red paralleling rays, the spines and anterior margin, including filamentous second ray, yellowish white; caudal fin red with narrow whitish upper and lower margins which become broader posteriorly on lobes; a yellow submarginal band in upper and lower caudal lobes; pectoral fins pink with an irregular longitudinal yellow band and several flecks of yellow on basal part of fin; pelvic fins yellow, suffused with light red, the anterior margin yellowish white.

Remarks. *Holanthias katayamai* is named in honor of Masao Katayama in recognition of his studies on Japanese serranid fishes. Dr. Katayama independently determined that this species of *Holanthias* has no scientific name.

Holanthias katayamai has an unusual caudal fin shape. If one had but a single specimen of this species, one might suspect the fin of being abnormal. There is a deep U-shaped concavity centrally in the posterior border which is suggestive of a wound inflicted by another fish on a fin that was originally slightly rounded. This effect is enhanced by the lack of a yellow border on the emarginate portion of the fin. This caudal fin structure is not unique to *H. katayamai*, however. It is found also in the Hawaiian species *H. fuscipinnis* (Jenkins) and the Japanese species

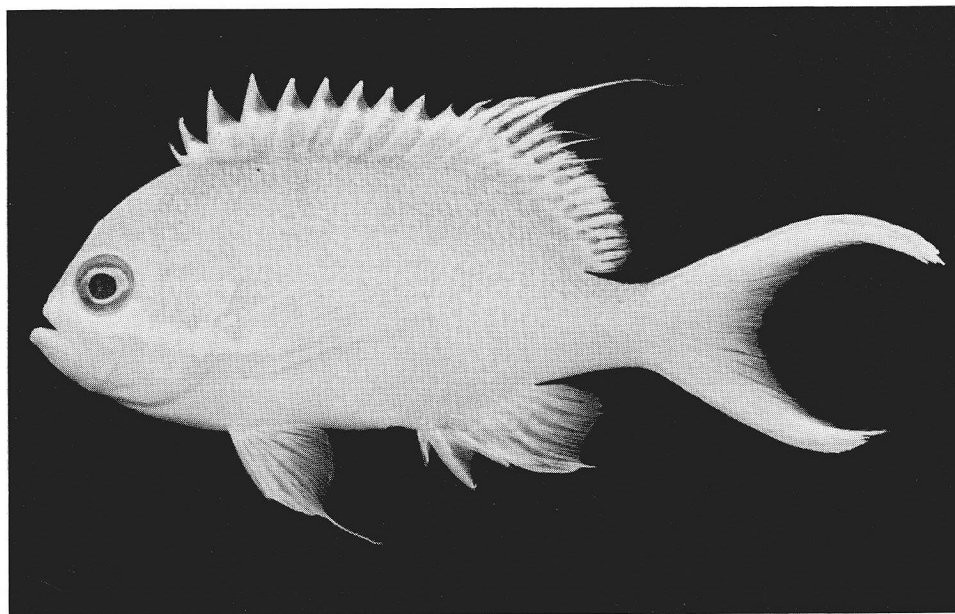


Fig. 2. *Holanthias chrysostictus*, 119 mm SL, Manado, Celebes, BPBM 22493. (Copy of Ektachrome slide).

H. flagris Yoshino et Araga. Both of these species are readily distinguished from *H. katayamai* by their elongate third dorsal spines, that of *H. flagris* produced into a long filament.

If caudal fin shape were ignored, *H. katayamai* would seem most closely related to *H. chrysostictus* (Günther), known in the literature only from the two syntypes collected off Manado, Celebes (Sulawesi), Indonesia. The senior author obtained a third specimen from the same locality (Fig. 2). The body proportions and meristic data are nearly the same; however there is little similarity in color other than the usual anthiine shades of pink and yellow. For more discussion of *H. chrysostictus* see remarks under *H. tapui*.

Holanthias katayamai is presently known only from the Mariana Islands and Japan (Ryukyu Islands, Kochi Prefecture, and Hachijo Island). Other than one record of "over 100 m," it is known from the depths of 177 and about 300 m. It might be expected to occur at other localities in the western Pacific such as the Bonin Islands, Taiwan, and the Philippines.

Holanthias tapui, sp. nov.

(Fig. 3)

Scalantarus chrysostictus (non Günther); Smith, 1964: 535, pl. 12 (Cook Islands).

Holotype: MNHN 1978/459, 141 mm SL, Society Islands, Tahiti, about one-third mile offshore from Vairao fringing reef (south coast of Tahiti), depth about 300 m, hook and line, local fisherman, April, 1975, donated by Jean Tapu of the Service des Pêches de Polynésie.

Paratypes: RUSI 4680, 157 mm SL, Cook Islands, found floating dead on surface offshore by long-line fisherman, July, 1964, donated by Ronald Powell, then the Fisheries Officer for the Cook Islands; BPBM 17345, 127.7 mm SL, Society Islands, Tahiti, Anthony Nahacky, late 1973.

Diagnosis. Dorsal rays X, 16; pectoral rays 16; lateral-line scales 37~40; gill rakers 13~15+29~32; head length 2.85~2.9 in SL; caudal fin extremely lunate with greatly prolonged lobes, the longest ray 1.3~1.6 in SL, the caudal concavity 1.7~2.4 in SL; no elongate dorsal spines, the fourth and tenth spines subequal; third dorsal, second anal, and second pelvic rays produced; small scales dorsally on snout extending anterior to nos-

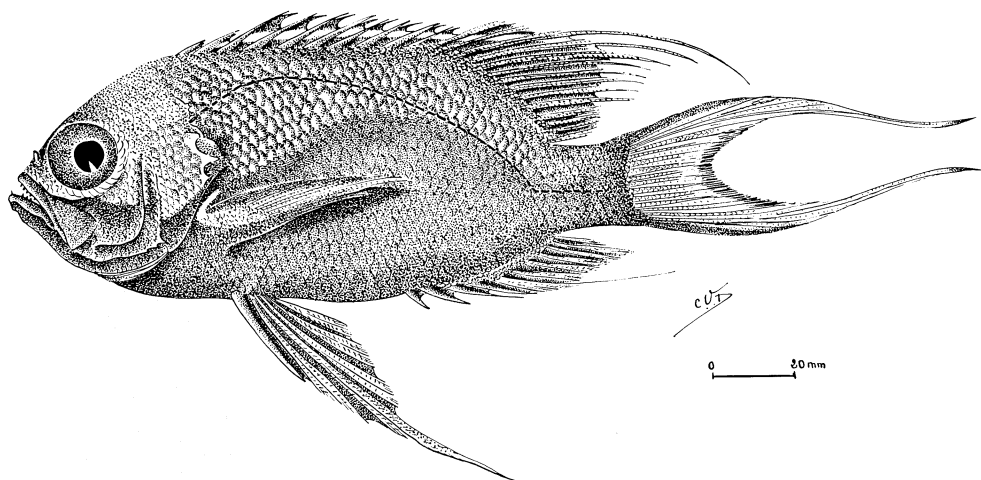


Fig. 3. Holotype of *Holanthias tapui* Randall, Maugé and Plessis, 141 mm SL, Society Islands, Tahiti, MNHN 1978/459. (Drawing by C. Vachon).

trils; head above level of upper edge of jaw nearly all bright yellow; body and ventral part of head violet, the scales dorsally on body and above pectoral fin with large yellow centers; dorsal fin violet, the filamentous rays yellow, submarginal yellow band in spinous portion of fin; caudal fin yellow with a narrow pale crescentic zone centroposteriorly in fin and violet upper and lower margins; anal and pelvic fins lavender, faintly suffused with yellow; pectoral fins lavender, with a broad median band of yellow.

Description. Dorsal fin rays X, 16; anal fin rays III, 7; pectoral fin rays 16 (upper two unbranched); pelvic fin rays I, 5; principal caudal rays 15 (upper and lower unbranched); upper and lower procurrent caudal rays 6; lateral-line scales 37 (39~40); scales above lateral line to origin of dorsal fin 7 (7~8); scales below lateral line to origin of anal fin 22 (20); circumpeduncular scales 24; gill rakers 13+29 (14~15+30~32); pseudobranch lamellae about 20; vertebrae 9+17; two free inter-neurals anterior to dorsal fin.

Body ovate and moderately deep, the depth 2.33 (2.40~2.44) in SL, and compressed, the width 2.56 (2.34~2.59) in depth; head length 2.90 (2.86~2.96) in SL; snout length 4.21 (4.17~4.18) in head; orbit diameter 3.16 (3.04~3.61) in head; interorbital space convex, the bony width 3.26 (3.61~3.76) in head; least depth of caudal peduncle 2.40 (2.39~2.63) in head.

Mouth moderately large, the lower jaw projecting, and highly oblique, forming an angle of about 50° to the horizontal; maxilla reaching slightly posterior to a vertical at hind edge of pupil; maxilla broadly expanded posteriorly, its greatest depth 1.62 (1.39~1.57) in orbit diameter, truncate posteriorly with rounded corners; no supramaxilla.

Upper jaw with an outer row of well-spaced canine teeth (more slender and more numerous than *H. katayamai*), ending in a stout canine or pair of canines at corner of front of jaw; most canines along side of jaw curved anteriorly and inwardly (those toward the front curving only inwardly); a band of villiform teeth in upper jaw in about nine irregular rows anteriorly, the inner medial teeth notably enlarged and recumbent, narrowing to about four rows anteriorly on side of jaw (where the outer row of canines are reduced in size), expanding slightly to about six rows along midside of jaw, and ultimately, at very end of jaw, to a single inner row; symphyseal gap without teeth at front of upper jaw contained about 7 times in orbit diameter. Lower jaw with a stout canine or close-set pair of canines which project obliquely anteriorly and outwardly from the anterior corner of jaw; a second large canine or close-set pair of canines about one-fourth distance from front of jaw; a villiform band of teeth in lower jaw in about eight rows anteriorly, narrowing to four or five behind anterior canines and ultimately

to a single row at posterior end of jaw, the inner row distinctly longer and incurved. Villiform teeth on vomer in a quadrangular lanceolate patch; broad patches of villiform teeth on palatines nearly touching vomerine patch anteriorly and abutting on a large pterygoid patch posteriorly; tongue broadly triangular, almost completely covered with a dense patch of villiform teeth except the projecting rounded anterior part.

Nostrils in front of upper third of eye, the anterior in a membranous tube which is elevated posteriorly, the posterior large, oval to subtriangular with a slightly membranous anterior rim; posterior nostril lying slightly more than maximum nostril diameter from rim of

orbit; a large pore above interspace between anterior and posterior nostrils.

Three prominent flat spines on opercle, the middle one largest, most posterior, and projecting obliquely upward; middle opercular spine about equidistant to upper and lower spines; preopercular margin serrate, with 26 (31~33) serrae on upper edge, 1~3 stout ones at angle and 0~5 below; subopercle with 5~9 serrae; interopercle with 3~5 serrae; posttemporal with a few strong serrae.

Scales ctenoid; no auxiliary scales except a few on head; no elongate pelvic axillary scale; scales on head, including maxilla, except side of snout below upper edge of posterior nostril; suborbital to below anterior fourth of eye,

Table 2. Proportional measurements of type specimens of *Holanhias tapui*, expressed as a percentage of the standard length.

	Holotype	Paratypes	
	MNHN 1978/459	BPBM 17345	RUSI 4680
Standard length (mm)	141.0	127.7	157.0
Depth of body	43.3	40.4	41.7
Width of body	16.9	15.6	17.8
Head length	34.5	33.8	35.0
Snout length	8.2	8.1	8.4
Orbit diameter	10.9	11.1	9.7
Postorbital length of head	17.5	16.1	17.0
Bony interorbital width	10.6	9.0	9.7
Length of maxilla	16.7	16.8	16.9
Greatest depth of maxilla	6.7	7.1	7.0
Least depth of caudal peduncle	14.4	14.1	13.3
Length of caudal peduncle	22.3	22.2	22.6
Snout to origin of dorsal fin	33.5	30.8	33.1
Snout to origin of anal fin	66.5	65.3	69.4
Snout to origin of pelvic fins	38.7	35.3	38.9
Length of dorsal fin base	65.2	65.8	64.5
Length of first dorsal spine	5.7	5.1	—
Length of second dorsal spine	9.1	9.0	9.6
Length of third dorsal spine	12.7	12.9	12.2
Length of fourth dorsal spine	14.2	14.5	14.5
Length of third dorsal ray	53.5	45.1	57.5
Length of anal fin base	18.9	20.0	20.3
Length of first anal spine	7.0	6.7	6.7
Length of second anal spine	13.1	14.5	12.9
Length of third anal spine	16.3	15.7	15.1
Length of second anal ray	40.1	33.1	38.7
Length of caudal fin	68.1	63.3	75.1
Caudal concavity	45.2	42.3	57.8
Length of pectoral fin	31.2	31.2	31.8
Length of pelvic spine	17.0	17.2	17.2
Length of pelvic fin	47.5	Broken	46.5

lips, branchiostegal rays and membranes, and part of mandible (a broad median band of scales on posterior two-thirds of mandible); scales progressively smaller anteriorly on upper part of head; caudal fin with small scales reaching nearly to posterior margin; soft portions of dorsal and anal fins with small scales basally and a narrow projection extending out on each interradiat membrane just behind ray about half the distance to margin of fin; paired fins with small scales basally.

Lateral line complete, in a smooth curve to straight portion on midside of caudal peduncle, broadly arched over pectoral region, the highest part centered below bases of sixth to ninth dorsal spines (where three rows of scales separate lateral line from dorsal fin base).

Origin of dorsal fin above anterior part of free edge of posttemporal; a vertical from first lateral-line scale in alignment with base of third dorsal spine; first dorsal spine slightly more than half length of second spine; second spine a little more than two-thirds length of third spine; fourth to tenth spines subequal, the fourth 2.42 (2.33~2.41) in head; third dorsal soft ray very elongate, 1.87 (1.74~2.21) in SL, and fourth to 13th dorsal rays also prolonged (only slightly in smallest paratype); last dorsal soft ray contained about 2.3 times in length of first soft ray and about 1.4 in fourth dorsal spine; interspinous membranes of dorsal fin more deeply notched anteriorly, the first membrane incised about three-fourths length of second dorsal spine while the last membrane is indented only about one-sixth length of tenth spine; a cirrus from upper part of each interspinous membrane of dorsal and anal fins; all dorsal and anal soft rays branched; origin of anal fin below base of third anal soft ray; third anal spine longest, 2.11 (2.15~2.32) in head; second anal spine contained about 1.10~1.25 in length of third anal spine; first anal spine about half length of second anal spine; second anal soft ray elongate, 2.50 (2.58~3.02) in SL; caudal fin lunate with greatly prolonged attenuate lobes, the longest ray 1.47 (1.33~1.58) in SL; caudal concavity 2.21 (1.73~2.36) in SL; ninth or tenth pectoral rays longest, reaching slightly posterior to a vertical at base of third anal

spine, 3.21 (3.14~3.21) in SL; origin of pelvic fins below upper base of pectoral fins; second pelvic ray greatly prolonged, when intact reaching to or beyond rear base of anal fin, its length 2.10 (2.15) in SL.

Color in alcohol pale, a little darker over interorbital space.

Color when fresh violet, each scale in the diagonal rows above the pectoral fin and above the lateral line with a bright yellow spot (spots small posteriorly, progressively larger anteriorly, unit on nape the scales are almost entirely yellow); head above a diagonal in line with upper edge of maxilla bright yellow except for most of opercular membrane which is violet; front of upper lip yellow; dorsal fin violet except for elongate distal parts of soft rays which are bright yellow and a yellow band in spinous portion of fin which commences near base of second spine and rises gradually to a submarginal position as it leaves spinous portion to link with the yellow of the prolonged third soft ray; anal and pelvic fins light violet, faintly suffused with yellow; caudal fin bright yellow except upper and lower margins which are violet (violet not extending to tips of caudal lobes) and a pale crescentic area with an inner margin of violet posteriorly in central part of fin; pectoral fins light violet with a broad median zone of yellow (solid yellow basally but continuing only on rays nearly to distal margin).

Remarks. *Holanthias tapui* is named in honor of Jean Tapu of the Service des Pêche in Papeete, Tahiti, who provided us with the holotype of this species as well as color photographs. He has donated other valuable specimens of Tahitian fishes in the past.

This species is most closely related to *H. chrysostictus* (Günther), described from two specimens taken off Manado, Celebes (Sulawesi), Indonesia, which were deposited in the British Museum (Natural History). These syntypes, BM(NH) 1871.7.20.142-143, 83.5 and 109 mm SL, were examined by one of us (L.A.M.). A third specimen of this species (BPBM 22493, 119 mm SL) was obtained by the senior author in 150 m off Manado in August, 1978, which has permitted us to make further comparisons of *H.*

chrysostictus and *H. tapui*.

Holanthias tapui differs from *H. chrysostictus* in having much longer lobes of the caudal fin (1.3~1.6 in SL, compared to 2.2~2.3 for *H. chrysostictus*), more gill rakers (42~47, compared to 40~41), the small scales dorsally on the snout extending half way from anterior nostrils to front of snout (scales end at anterior nostrils on *H. chrysostictus*), in having the fourth to tenth dorsal spines almost equal in length (on *H. chrysostictus* the fourth and fifth dorsal spines are the longest; the length of the tenth spine is contained about 1.1 times in the length of either the fourth or fifth spines), and in color. The head of *H. tapui* above a diagonal at the upper edge of the maxilla is nearly all bright yellow, the ventral part lavender. On *H. chrysostictus* there is a yellow band running from the snout along the lower edge of the eye to the pectoral base; this band is separated from the predominating yellow color of the more dorsal part of the head by an irregular zone of magenta; the body and lower part of the head are magenta, lighter ventrally; there is a yellow spot on the body scales, more evident dorsally, but the yellow is on the posterior part of each scale, not centrally as seen on *H. tapui* (except on nape); the dorsal soft rays of *H. tapui* are violet except the filamentous tips which are yellow; the dorsal soft rays of *H. chrysostictus* are primarily yellow; there is a whitish crescentic region posteriorly in the caudal fin of *H. tapui* which is set off from the yellow of the rest of the fin by a violet line; this pale crescent is lacking on the caudal fin of *H. chrysostictus*.

Holanthias tapui is known from three specimens, two from Tahiti and one from the Cook Islands. The latter, sent on loan from the J. L. B. Smith Institute of Ichthyology, Rhodes University, measures 157 mm SL. Smith's (1964: 537) recording of the standard length as 167 mm was probably a typographical error.

Acknowledgments

We wish to thank Chuichi Araga, Harry T. Kami, Anthony Nahacky, Jean Tapu, and Tetsuo Yoshino for the collection and/or donation of specimens of *Holanthias* for this study. We are also grateful to Margaret M.

Smith of the J. L. B. Smith Institute of Ichthyology of Rhodes University (RUSI) for the loan of the specimen of *H. tapui* from the Cook Islands. William D. Anderson, Jr. kindly reviewed the manuscript.

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バラハナダイ属 *Holanthias* の2新種

John E. Randall • L. A. Maugé • Yves B. Plessis

バラハナダイ属の2新種, バラハナダイ *H. katabamai* と *H. tapui* を記載した. 両称とも, 以前 *Scalantarus chrysostictus* と同定されていたものである. バラハナダイは Guam と日本南部から知られ, 切れ込んだ尾鰭の両葉が幅広く丸いこと, 延長した背鰭棘が無いが, 第3背鰭軟条, 第2臀鰭軟条, 第2腹鰭軟条が延長することで区別される. *H. tapui* は Tahiti と Cook 島から知られ, *H. chrysostictus* に酷似するが, 尾鰭が長いこと, 鰓耙が多いこと, 色彩で区別される.